### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-003177 Address: 333 Burma Road **Date Inspected:** 08-Jun-2008

City: Oakland, CA 94607

**OSM Arrival Time:** 630 **Project Name:** SAS Superstructure **OSM Departure Time:** 1530 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes An Qing Xiang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component: OBG & Tower** 

### **Summary of Items Observed:**

Caltrans Quality Assurance Inspector (QAI) Bruce Berger arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to periodically monitor welding and Quality Control (QC) functions. While on site the QAI observed and/or discovered the following.

Bay 1 OBG

Various activities in the shop today included the milling of plate edges for the close u-ribs, and drilling of bolt holes. Deck Panel DP597-001 has its closed ribs tack welded in place and DP596 panels is laid out on the table lined off with partial cleaning of the plate where closed ribs are to be welded in place. Deck Panel DP601-001 has the closed ribs tack welded in place and run off plates being fitted on. Internal diaphragm plates are being fitted and tack welded in place on various closed ribs in the bay.

Bay 1 New Tower Shop

This QAI observed welding of complete joint penetration weld SSD1-SA16 A/G-46B Skin Plate Face E Sub Assembly with the submerged arc welding (SAW) process. Essential welding variables and welder information are recorded below.

This QAI observed welding of run off tabs for SSD1-SA17 G/G-58A Skin Plate Face C Sub Assembly.

Bay 2 New Tower Shop



# WELDING INSPECTION REPORT

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This QAI observed welding of complete joint penetration weld ESD1-SA107 D/J-2A Skin Plate Face A Sub Assembly with the submerged arc welding (SAW) process. Essential welding variables and welder information are recorded below.

This QAI observed welding of complete joint penetration weld ESD1-SA296 A/E-6A Skin Plate Face D Sub Assembly with the submerged arc welding (SAW) process. Essential welding variables and welder information are recorded below.

Iten	Weld Identification	Applicable WPS CWI Name	Amperage	Voltage	TravelSpeed	Preheat Temp	Remarks
1	ESD1-SA107 D/J-2A	WPS-B-T-2231-B_UAn Quing Xiang	320	30.6	315mm/min	180C	Welder Zhang Bing
							Hua 053316
2	ESD1-SA296 A/E-6A	WPS-B-T-2221-B-U3/Ch Quing Xiang	661	32.9	610mm/min	168C	Welder Sue Xi An
							040634
3	SSD1-SA16-A/G-46B	WPS-B-T-2221-B-U3C	625	32.4	545mm/min	160C	Welder Xu Yan
							052917

### **Summary of Conversations:**

This QAI spoke with Wang Lu Testino concerning the welding of the PMT for today. Wang stated that the PMT is scheduled to be welded at midnight tonight.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Patrick Lowery 858 344-2712, who represents the Office of Structural Materials for your project.

Inspected By:	Berger,Bruce	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer